

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002165**Date Inspected:** 10-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Fabrication**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Orthotropic Box Girder (OBG) and Tower Fabrication:

CWI Inspectors: Mr. Chao Chen Sun, Mr. Sun Wei

Bay 1

The QA Inspector observed ZPMC welder Mr. Gong Zhiwu, stencil 59405 is using welding procedure specification WPS-B-T-2233-B-U2-F to make flux cored closed rib splice weld DP327-001-156. The QA Inspector observed a welding current of approximately 205 amps and 23.9 volts. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Ms. Dong Yiqan, stencil 59450 is using welding procedure specification WPS-B-T-2133 to make a flux cored fillet weld on OBG deck plate closed rib stiffener plate weld DP053-001-189. The QA Inspector observed a welding current of approximately 230 amps 24.0 volts and a welding travel speed of approximately 200 mm per minute. Items observed by the QA Inspector appear to comply with project specifications.

WELDING INSPECTION REPORT

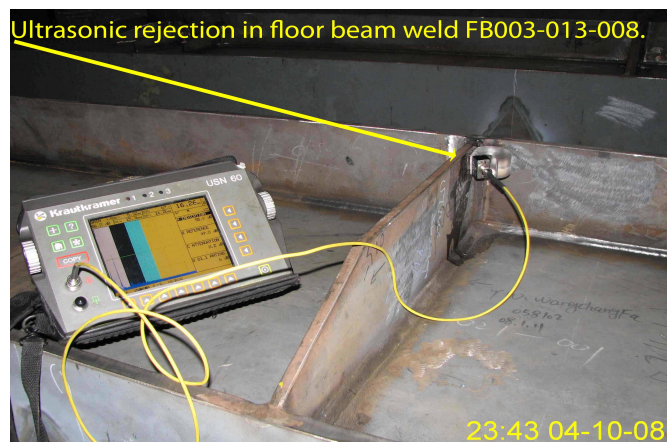
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Bay 4

The QA Inspector observed ZPMC welder Mr. Gu Cai Hong stencil 53748 is using welding procedure specification WPS-B-T-3221-B-L2C-S-1 to make submerged arc groove weld NSD1-SA322-A/B-1B(2B). The QA Inspector observed a welding current of approximately 630 amps, 31.0 volts, a travel speed of 500 mm per hour, and the base material is between 110°C and 230°C. Items observed by the QA Inspector appear to comply with project specifications.

Bay 7

The QA Inspector performed ultrasonic inspection of OBG floor beam complete joint penetration welds FB003-012-008; FB003-012-044; FB003-013-044; FB-013-008 FB003-015-008; FB003-015-044; FB003-017-008; FB003-017-044; FB003-018-008; FB003-018-044; FB003-020-008 and FB003-020-044. Weld FB003-013-008 appears to have two class "A" UT rejection areas and the other 11 welds appear to comply with project specifications. See the TL-6027 "Ultrasonic Test Report" dated today and the photograph below for additional information. The QA Inspector informed ZPMC QC representative Mr. Shen Hue Jun that weld FB003-013-008 does not appear to comply with project specifications.



Summary of Conversations:

See above for summary of conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowey (858) 344-2712, who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Hager,Craig

QA Reviewer